

What is claimed is:

- Rule 126*
1. A method for treating Parkinson's disease in a subject in need of such treatment, comprising administering levodopa and a high dose of a partial glycine agonist to the subject, wherein the efficacy of the levodopa is enhanced or the frequency and severity of levodopa-induced side effects in the subject is reduced.
  2. The method of claim 1, wherein the partial glycine agonist is selected from the group consisting of D-cycloserine, D-serine, ACPC and serine racemase.
  3. The method of claim 1, wherein the partial glycine agonist is D-cycloserine.
  4. The method of claim 1, further comprising administration of a peripheral dopa decarboxylase inhibitor.
  5. The method of claim 5, wherein the peripheral dopa decarboxylase inhibitor is carbidopa or benserazide.
  6. The method of claim 1, wherein the levodopa side effects are dyskinesias or dystonias.
  7. The method of claim 1, wherein the high dose of partial glycine antagonist is sufficient to deliver at least 8 mg of partial glycine agonist per kg body weight of the subject.
  8. The method of claim 1, wherein the high dose of partial glycine antagonist is sufficient to deliver 8 mg to 12 mg of partial glycine agonist per kg body weight of the subject.
  9. The method of claim 1, wherein the levodopa and partial glycine agonist are administered simultaneously.
  10. The method of claim 1, wherein the levodopa and partial glycine agonist are administered as a single-dose pharmaceutical composition.

11. The method of claim 1, wherein the levodopa or partial glycine agonist is administered enterally.
12. The method of claim 11, wherein the enteral administration is oral or rectal.
13. The method of claim 1, wherein the levodopa or partial glycine agonist is administered parenterally.
14. The method of claim 13, wherein the parenteral administration is selected from the group consisting of intravascular administration; subcutaneous injection, subcutaneous deposition; intramuscular injection, intraperitoneal injection, transdermal, nasal or inhalational.
15. The method of claim 1, wherein the levodopa and partial glycine agonist are administered orally.
16. A method for increasing the therapeutic index of levodopa in a subject being treated for Parkinson's disease, comprising administering levodopa and a high dose of a partial glycine agonist to the subject.
17. The method of claim 16, wherein the partial glycine agonist is selected from the group consisting of D-cycloserine, D-serine, serine racemase and ACPC.
18. The method of claim 16, wherein the partial glycine agonist is D-cycloserine.
19. The method of claim 16, further comprising administration of a peripheral dopa decarboxylase inhibitor.
20. The method of claim 19, wherein the peripheral dopa decarboxylase inhibitor is carbidopa or benserazide.

21. The method of claim 16, wherein the high dose of partial glycine antagonist is sufficient to deliver at least 8 mg of partial glycine agonist per kg body weight of the subject.

22. The method of claim 16, wherein the high dose of partial glycine antagonist is sufficient to deliver 8 mg to 12 mg of partial glycine agonist per kg body weight of the subject.

23. The method of claim 16, wherein the levodopa and partial glycine agonist are administered simultaneously.

24. The method of claim 16, wherein the levodopa and partial glycine agonist are administered as a single-dose pharmaceutical composition.

25. The method of claim 16, wherein the levodopa or partial glycine agonist is administered enterally.

26. The method of claim 16, wherein the levodopa or partial glycine agonist is administered parenterally.

*Rule 126*  
<sup>27</sup>  
28. The method of claim 16, wherein the levodopa and partial glycine agonist are administered orally.

<sup>28</sup>  
~~29~~. A kit comprising:  
a partial glycine agonist; and  
instructions for administering a high dose of a partial glycine agonist to a subject for the treatment of Parkinson's disease.

<sup>29</sup>  
~~30~~. The kit of claim <sup>28</sup>~~29~~, further comprising instructions for administering the partial glycine agonist in combination with levodopa for the treatment of Parkinson's disease.

<sup>30</sup>  
~~31~~. The kit of claim <sup>29</sup>~~30~~, wherein the kit further comprises levodopa.

- <sup>31</sup>  
~~32.~~ The kit of claim <sup>29</sup>~~30~~, wherein the partial glycine agonist is selected from the group consisting of D-cycloserine, D-serine, serine racemase and ACPC.
- <sup>32</sup>  
~~33.~~ The kit of claim <sup>29</sup>~~30~~, further comprising a peripheral dopa decarboxylase inhibitor.
- <sup>33</sup>  
~~34.~~ The kit of claim <sup>32</sup>~~33~~, wherein the peripheral dopa decarboxylase inhibitor is carbidopa or benserazide.
- <sup>34</sup>  
~~35.~~ The kit claim <sup>29</sup>~~30~~, wherein the instructions specify administering greater than 1 mg/kg partial glycine agonist relative to the body weight of the subject.
- <sup>35</sup>  
~~36.~~ The kit claim <sup>29</sup>~~30~~, wherein the instructions specify administering at least 8 mg/kg partial glycine agonist relative to the body weight of the subject.
- <sup>36</sup>  
~~37.~~ The kit claim <sup>29</sup>~~30~~, wherein the instructions specify administering 8 mg/kg to 12 mg/kg partial glycine agonist relative to the body weight of the subject.
- <sup>37</sup>  
~~38.~~ The kit of claim <sup>29</sup>~~30~~, in which the levodopa and the partial glycine agonist are provided in a single-dose pharmaceutical composition.
- <sup>38</sup>  
~~39.~~ A method of treating a subject suffering from Parkinson's disease, comprising administering to a subject in need of such treatment a high dose of a partial glycine agonist.
- <sup>39</sup>  
~~40.~~ The method of claim <sup>38</sup>~~39~~, wherein the partial glycine agonist is selected from the group consisting of D-cycloserine, D-serine, serine racemase and ACPC.
- <sup>40</sup>  
~~41.~~ The method of claim <sup>38</sup>~~39~~, wherein the high dose of partial glycine antagonist is sufficient to deliver at least 8 mg of partial glycine agonist per kg body weight of the subject.
- <sup>41</sup>  
~~42.~~ The method of claim <sup>38</sup>~~39~~, wherein the high dose of partial glycine antagonist is sufficient to deliver 8 mg to 12 mg of partial glycine agonist per kg body weight of the subject.